

WHAT IS CLAIMED IS:

1. A packaging assembly comprising:
  - at least one retention sleeve having a peripheral length and an open end;
  - at least one frame member having a body portion;
  - 5 at least one foldable portion defined on the body portion, the foldable portion including a plurality of folds, the plurality of folds being configured such that the foldable portion is moveable between a first position and a second folded position in which foldable portion forms a releasably engageable peripherally extending structure within the retention sleeve when the frame member is received within the retention sleeve;
  - 10 at least one rotatable member rotatably connected to the body portion; and
    - al least one retention member having a pocket configured to receive the rotatable member.
- 15 2. A packaging assembly comprising at least a first retention sleeve having a peripheral length and a first open end, at least a first frame member having a body portion and at least a first foldable portion which includes a plurality of folds, the plurality of folds being configured such that the at least a first foldable portion is moveable between a first position and a second folded position in which the first foldable portion forms a releasably engageable peripherally extending structure within the first retention sleeve when the first frame member is received within the first retention sleeve.
- 20 3. The assembly according to Claim 2, wherein the first sleeve is pliable and the first frame member is substantially rigid.
- 25 4. The assembly according to Claim 3, wherein the first sleeve is substantially resilient.
- 30 5. The assembly according to Claim 2 additionally comprising at least a first receptacle formed on the body, the first foldable portion comprising a first end of the body, at least a first projection formed on the first end, the first receptacle being configured to releasably engage the first projection.

6. The assembly according to Claim 5, wherein the plurality of folds are arranged between the first projection and the first receptacle.

7. The assembly according to Claim 2, wherein the peripherally extending structure is a triangular cylinder.

5 8. The assembly according to Claim 2, wherein at least one of the sleeve and the folds is configured such that when the first projection is received within the first receptacle, the sleeve is elastically distorted.

10 9. The assembly according to Claim 8, wherein at least one of the sleeve and the folds is configured such that when the first projection is received within the first receptacle, the sleeve elastically biases the first projection into engagement with the first receptacle.

15 10. The assembly according to Claim 2, wherein at least one of the sleeve and the folds is configured such that when an article to be packaged is placed between the frame member and the sleeve, and the projection is received within the receptacle, the sleeve is elastically deformed around the article.

11. The assembly according to Claim 2 additionally comprising at least a second foldable portion having a second plurality of folds configured to form a second releasably engageable peripherally extending structure.

20 12. The assembly according to Claim 11 additionally comprising a second retention sleeve, and a second frame member having at least two foldable portions each of which are configured to form releasably engageable peripherally extending structures within the second retention sleeve.

25 13. The assembly according to Claim 12, wherein each of the first and second frame members are configured to form an unsupported span of the first and second sleeves, respectively.

14. The assembly according to Claim 13, wherein the first and second frame members are configured to nest with the respective unsupported spans facing each other.

15. The assembly according to Claim 14, wherein at least the first foldable portion of the first frame member includes tapered portions.

16. The assembly according to Claim 2 additionally comprising at least a first rotatable member rotatably connected to the first frame member and a second retention having a pocket configured to receive the first rotatable member

5 17. The assembly according to Claim 16, wherein the second retention member has a width sufficient to form gathers on at least one side of an article to be packaged disposed between the first and second retention members.

18. The assembly according to Claim 16 additionally comprising means for forming gathers around substantially an entire periphery of an article to be packaged disposed between the first and second retention members.

10 19. A packaging assembly comprising:

at least a first retention member having a length, a first end, and a second end opposite the first end, the first retention member having at least first and second pockets formed at the first and second ends, respectively; and

15 a first frame member having a first portion configured to be received within the first pocket and a second portion configured to be received within the second pocket, at least one of the first and second portions being rotatable.

20. The assembly according to Claim 19, wherein the first retention member is substantially resilient, the first frame member being substantially rigid.

21. The assembly according to Claim 19, wherein the first frame member is formed of a substrate having a central portion and at least a first and a second fold line, the first fold line extending between the first portion and the central portion of the frame member and the second fold line extending between the central portion and the second portion.

25 22. The assembly according to Claim 19, wherein the first and second portions are rotatable between a first position in which the first retention member is slackened when the first and second portions are received in the first and second pockets; and a second position in which the first retention member is elastically distorted when the first and second portions are received in the first and second pockets.

30 23. The assembly according to Claim 19, wherein at least one of the first portion, the second portion, and the first retention member is sized such that the retention member is stretched over an article to be packaged when the article is placed

between the first frame member and the first retention member and the first and second members are rotated towards a position which tightens the first retention member.

24. The assembly according to Claim 19 additionally comprising a second retention member having third and fourth pockets formed on opposite ends thereof, a  
5 second frame member having third and fourth portions configured to be received by the third and fourth pockets, respectively, the first frame member including a first aperture defined between the first and second portions and the second frame member includes a second aperture formed between the third fourth portions, the first and second frame members being rotatably connected to each other.

10 25. The assembly according to Claim 19 additionally comprising a container having an inner wall, the frame member including a first surface and a second surface, and wherein at least one of the first member, second member, and the first retention member being configured such that when an article to be packaged is positioned between the first surface of the frame member and the first retention member and the  
15 first and second members are folded so as to tighten the first retention member, the first and second portions form a spring between the first frame member and the inner wall of the container.

20 26. The assembly according to Claim 19 additionally comprising a container having a plurality of walls defining an interior space and at least one support member projecting into the interior space, the container being configured to receive the frame member and the retention member.

27. The assembly according to Claim 26, wherein the support member is separate from the container.

25 28. The assembly according to Claim 26, wherein the support member is formed unitarily with at least one of the plurality of walls of the container.

29. The assembly according to Claim 26, wherein the container is a box.

30 30. The assembly according to Claim 27, wherein the support member is a releasably engageable peripherally extending structure comprised of a portion of at least one of the walls of the container.

30 31. The assembly according to Claim 19 additionally comprising a first foldable portion disposed on the first frame member, the first foldable portion including

a plurality of folds configured to allow the first foldable portion to be folded between a first position and a second position, the foldable portion forming a releasably engageable peripherally extending structure when in the second position.

32. The assembly according to Claim 31 additionally comprising a second retention sleeve configured to extend around the first frame member and the first foldable portion.

33. A packaging assembly comprising a first frame member having first and second free edges, a second frame member having third and fourth free edges, a first retention member extending between the first and second free edges, a second retention member extending between the third and fourth free edges, the first and second frame members being configured to nest with the first and second retention members facing each other.

34. The assembly according to Claim 33, wherein the first and second retention members are substantially resilient, the first and second frame members being substantially rigid.

35. The assembly according to Claim 33, wherein the first frame member includes at least a first tapered portion extending from the first free edge.

36. The assembly according to Claim 35, wherein the second frame member includes at least a first inclined wall extending from the third free edge, the first tapered portion being configured to receive the first inclined wall in nesting engagement.

37. The assembly according to Claim 33, wherein the first and second free edges extend longitudinally, each of the first and second free edges including tapered portions disposed at opposite longitudinal ends thereof.

38. The assembly according to Claim 37 additionally comprising third and forth inclined walls supporting the third and fourth free edges, respectively, the tapered portions being configured to receive the inclined walls in nesting engagement.

39. The assembly according to Claim 38, wherein at least one of the tapered portions and the inclined walls are configured such that the first and second retention members are deflected inwardly when the tapered portions and the inclined walls are nested.

40. The assembly according to Claim 39 additionally comprising a first recessed area of the first frame member disposed between the first and second free edges and a second recessed area of the second frame member disposed between the third and fourth free edges.

5 41. The assembly according to Claim 40, wherein the first and second retention members are deflected toward the first and second recessed areas, respectively, when the tapered portions and the inclined walls are nested.

42. The assembly according to Claim 33, wherein the retention members are substantially resilient, the first and second frame members being substantially rigid.

10 43. The assembly according to Claim 33, wherein the first frame member comprises first and second peripherally extending structures supporting the first and second free edges, respectively, the second frame member comprising third and fourth peripherally extending structures supporting the third and fourth free edges, respectively.

15 44. The assembly according to Claim 43, additionally comprising tapered portions formed on the opposite ends of each of the first and second free edges, and at least first and second inclined walls forming a portion of the third and fourth peripherally extending structures, respectively.

20 45. The assembly according to Claim 44, wherein the tapered portions extend along a first angle of inclination, the first and second inclined walls extending along a second angle of inclination that is approximately equal to the first angle of inclination.

46. The assembly according to Claim 44, wherein the first, second, third, and fourth peripherally extending structures are triangular in cross section.

25 47. A packaging assembly comprising a first frame member having a main frame portion with first and second sides and first and second rotatable portions being rotatable relative to the main frame portion, the main frame portion being disposed between the first and second rotatable portions, and at least a first resilient member extending between and engaged with the first and second rotatable portions and having a mid-point disposed on the first side of the main frame portion, at least one of the first rotatable portion, the second rotatable portion, and the first resilient member being

configured such that when the first and second rotatable portions are rotated away from the mid-point of the resilient member to an angle greater than 90 degrees from a position in which the first and second rotatable portions are co-planar with the main frame portion, the first and second rotatable portions and the first resilient member form  
5 a spring on the second side of the main frame portion.

48. The assembly according to Claim 47 additionally comprising a box with an inner height less than a maximum height of the frame member.

49. A packaging assembly comprising a first frame member having a main frame portion with first and second sides and first and second rotatable portions being rotatable relative to the main frame portion, the main frame portion being disposed between the first and second rotatable portions, and at least a first retention member extending between and engaged with the first and second rotatable portions and having a mid-point disposed on the first side of the main frame portion, the first and second rotatable portions being rotated away from the mid-point of the retention member to an angle substantially greater than 90 degrees from a position in which the first and second rotatable portions are co-planar with the main frame portion.  
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50. The assembly according to Claim 49, wherein the first retention member is constructed of a resilient material and is sized to bias the first and second rotatable portions to rotate toward the mid-point of the first retention member.

51. The assembly according to Claim 49 additionally comprising a box with an inner height less than a maximum height of the frame member.  
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52. A packaging assembly for packaging articles, the packaging assembly comprising at least a frame member and a first retention member not affixed to the first frame member, and means for tightening the first retention member from a first position  
25 in which the elastic member is slackened.

53. The assembly according to Claim 52 additionally comprising means for forming a spring.

54. The assembly according to Claim 52, wherein the first retention member is a resilient film, the assembly additionally comprising means for substantially  
30 enveloping an article to be packaged with the resilient film.

55. A packaging assembly comprising a first retention sleeve, a first semicircular member configured to be received within the first retention sleeve, a second retention sleeve, a second semicircular member configured to be received within the second sleeve member, and a retention device configured to secure the first and second semi-circular members to each other in an opposed relationship.

56. The assembly according to Claim 55, wherein the retention device is a cylindrical member configured to receive the first and second retention sleeves and the first and second rigid semicircular members.

57. The assembly according to Claim 56, wherein the first and second rigid semicircular members have a radius of curvature approximately equal to a radius of curvature of the rigid cylindrical member.

58. A packaging kit comprising a first semicircular member, a first retention sleeve configured to receive the first semicircular member, a second semicircular member, a second retention sleeve configured to receive the second semicircular member, and a retention device configured to secure the first and second semicircular members to each other in an opposed relationship.

59. The packaging kit according to Claim 58, wherein the retention device is a rigid cylindrical member configured to receive the first and second semicircular members.

60. The packaging kit according to Claim 59 additionally comprising first and second open ends formed on the rigid cylindrical member and first and second caps configured to close the first and second ends of the rigid cylindrical member.

61. The packaging kit according to Claim 58, wherein each of the semicircular members include free lateral edges extending along open portions and wherein the retention sleeves and the semicircular members are configured such that when the semicircular members are received within the respective sleeves, a portion of each sleeve spans the open portion of the respective semicircular members.

62. The packaging kit according to Claim 61, wherein the sleeves are sized such that when an article to be packaged is disposed between the portions of the sleeves spanning the open portions of the semicircular members, the sleeves are elastically distorted around the article.

63. A frame for a packaging assembly, the frame comprising a body portion and at least a first foldable portion, the at least a first foldable portion including includes at least a first plurality of folds, the first plurality of folds being configured such that the first foldable portion is moveable between a first position and a second deployed position in which the first foldable portion forms a releasably engageable peripherally extending structure defining a boundary substantially surrounding a volume of space.

5           64. The frame according to Claim 63, wherein the peripherally extending structure has a triangular shape.

10          65. The frame according to Claim 63 additionally comprising a second foldable portion configured to form a second peripherally extending structure.

66. The frame according to Claim 65, wherein the body is sized such that a gap is formed between the first and second peripherally extending structures.

67. The frame according to Claim 65, wherein the body is sized such that a the first and second peripherally extending structures act against each other.

15          68. The frame according to Claim 63, wherein the first peripherally extending structure extends from the body.

69. A packaging assembly comprising:

a frame assembly comprising at least one of a substrate having a rotatable portion, a substrate having a foldable portion configured to form at least one peripherally extending structure, and a pair of rigid semi-circular members;

20          at least a first retention assembly comprising at least one of a sleeve, and a pair of pockets, the frame assembly being configured to cooperate with the retention assembly so as to tighten the retention assembly around an article to be packaged; and

25          a container having a plurality of walls defining an interior space and a support member projecting from at least one of the walls into the interior space.

70. The container according to Claim 69 wherein the container additionally comprises a plurality of flaps defining a foldable portion configured to form the support member.

30          71. The container according to Claim 69, wherein the container additionally comprises a foldable portion configured to form a releasably engageable peripherally

extending structure when folded in the second position, the releasably engageable peripherally extending structure defining the support member.

72. The container according to Claim 69, wherein the support member is disposed on an inner surface of the bottom of the container.

5 73. The container according to Claim 69, wherein the support member is configured to act against an unsupported span of the retention assembly extending between free edges of the frame assembly.